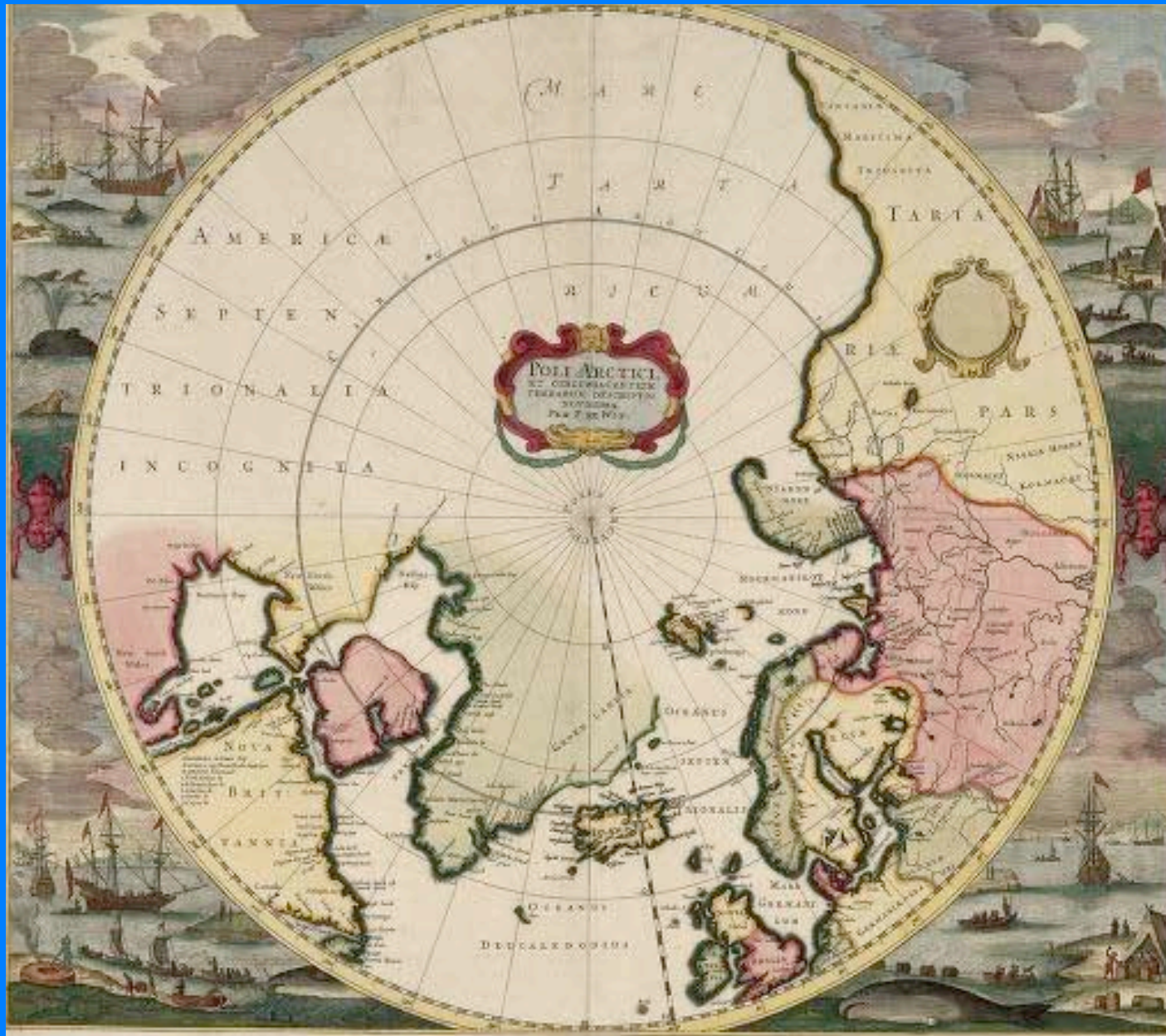


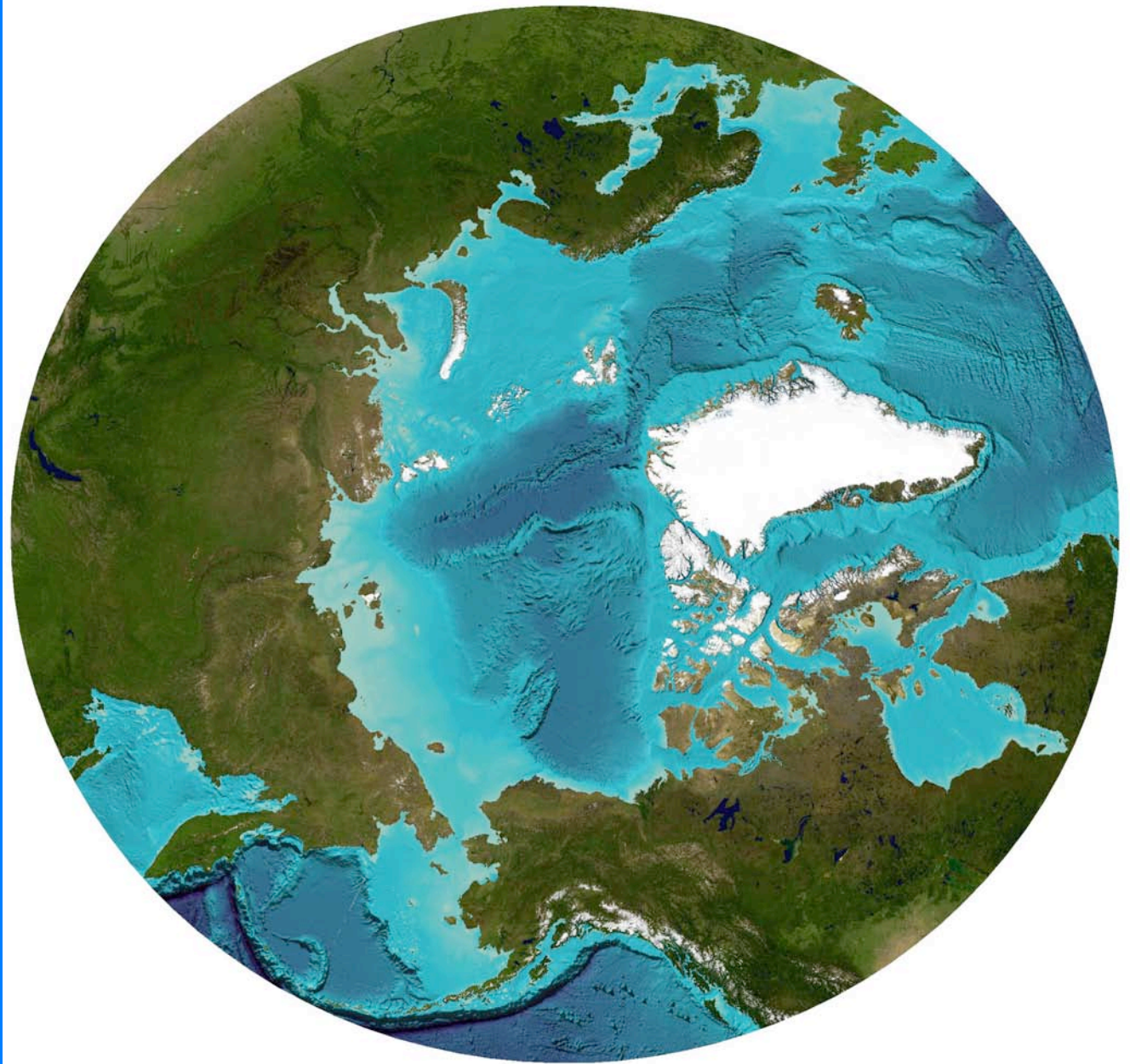


U.S. Arctic Research and Alaska Resource Development

**Mead Treadwell, Chair
U.S. Arctic Research Commission
Senior Fellow, Institute of the North
March 1, 2007 – Resource Development Council
Anchorage, AK
www.arctic.gov**

The Arctic, 1715: Lands Unknown

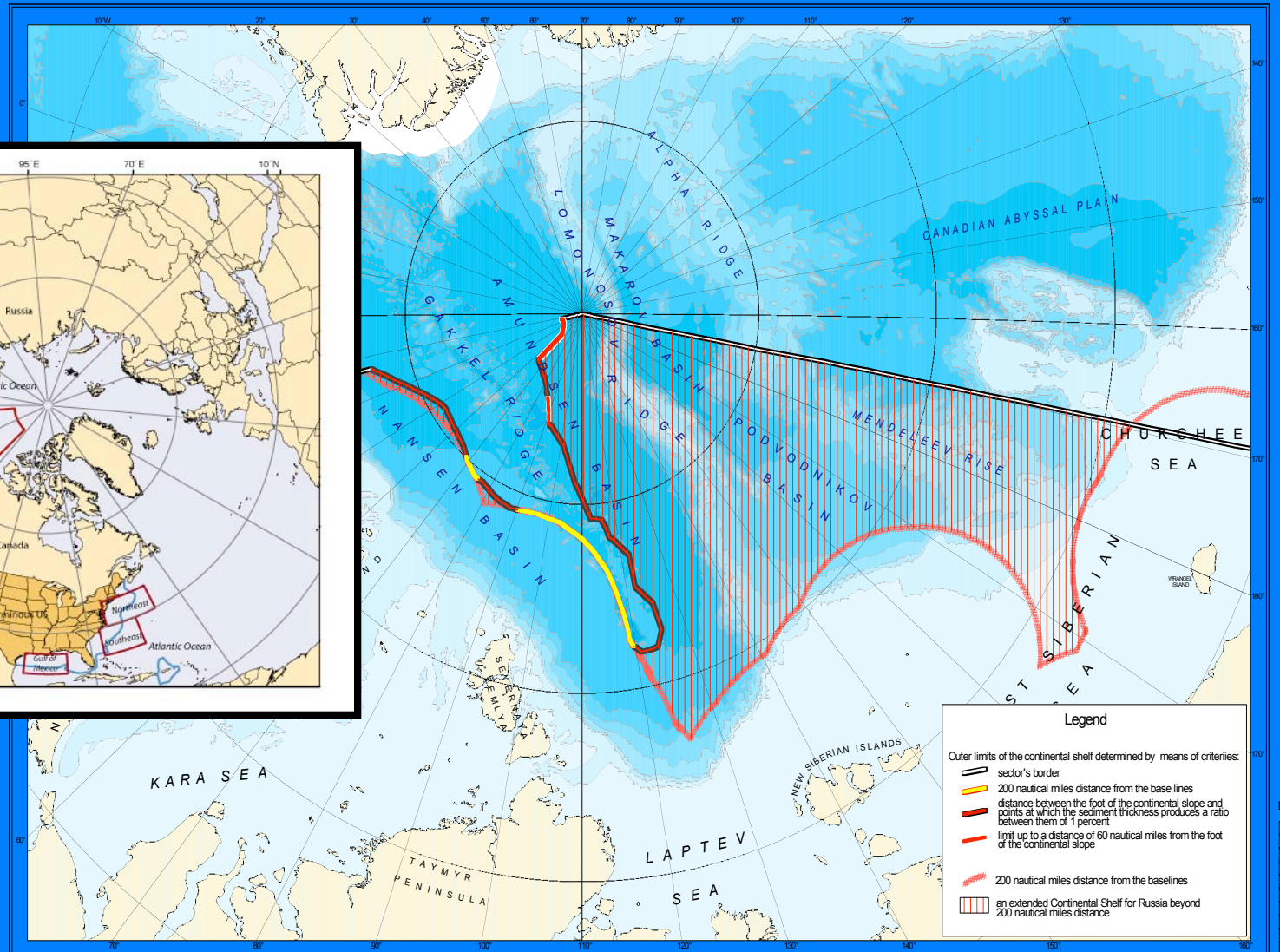
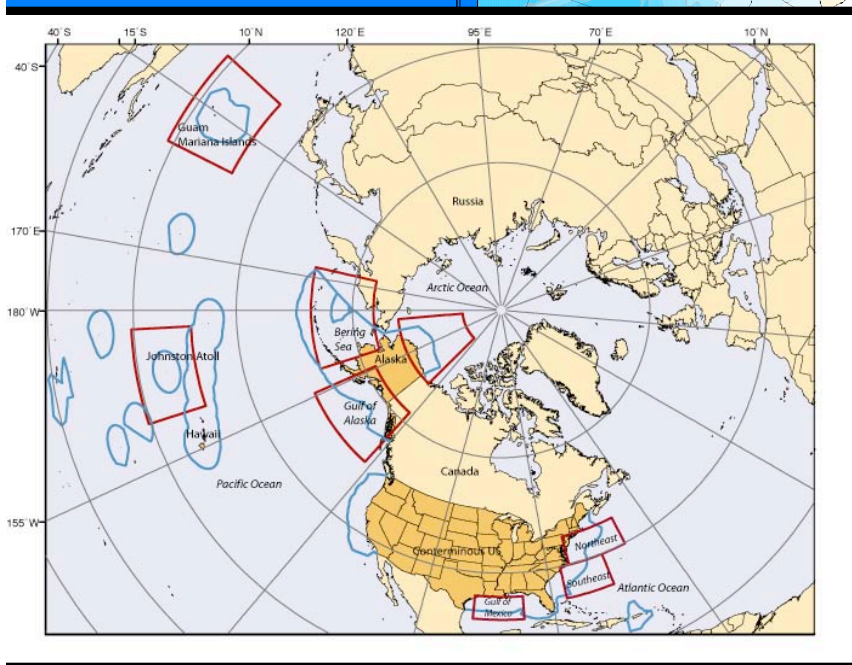




IBCAO: New Bathymetry



New Arctic Territory?



Source:
Russian
Federation
claim

SEA ICE: *Summer Minimum Extent*

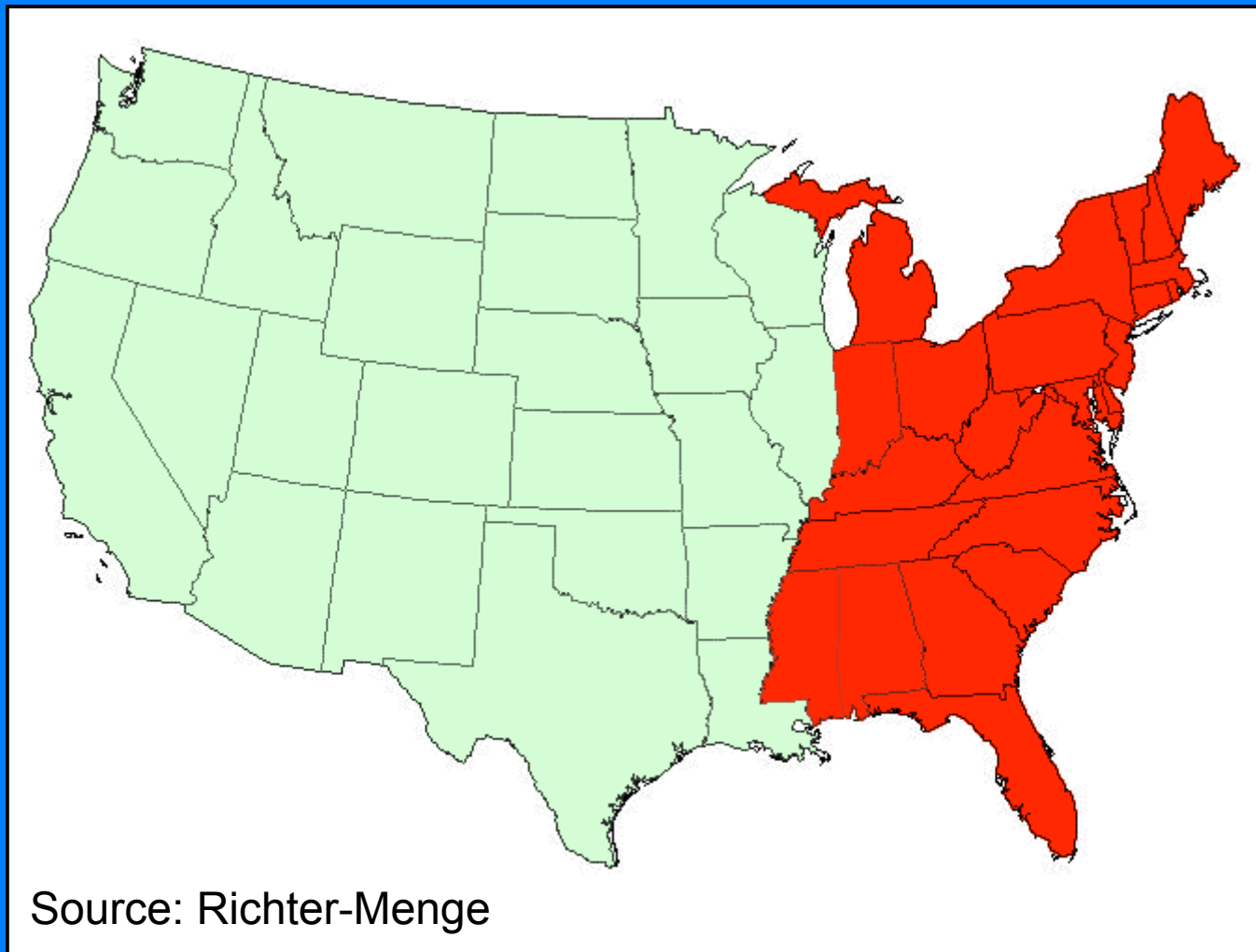


Reduction from 1982 to 2005

Source: Richter-Menge

SEA ICE: *Summer Minimum Extent*

Reduction from 1982 to 2005



22 states – Almost entire US east of the Mississippi



INSROP (1999)

New Shipping Routes?

July 2001

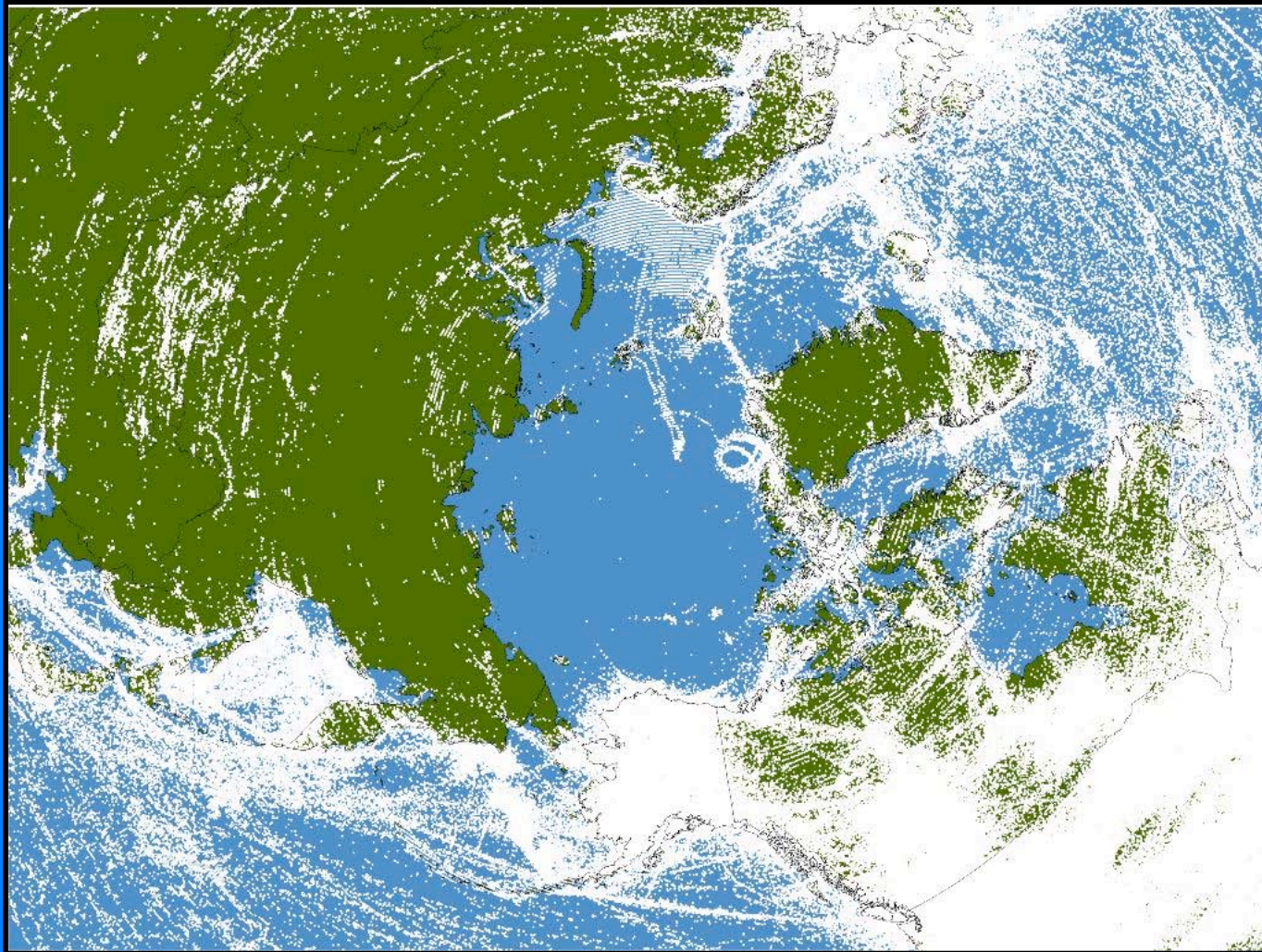
Arctic Voice and Data



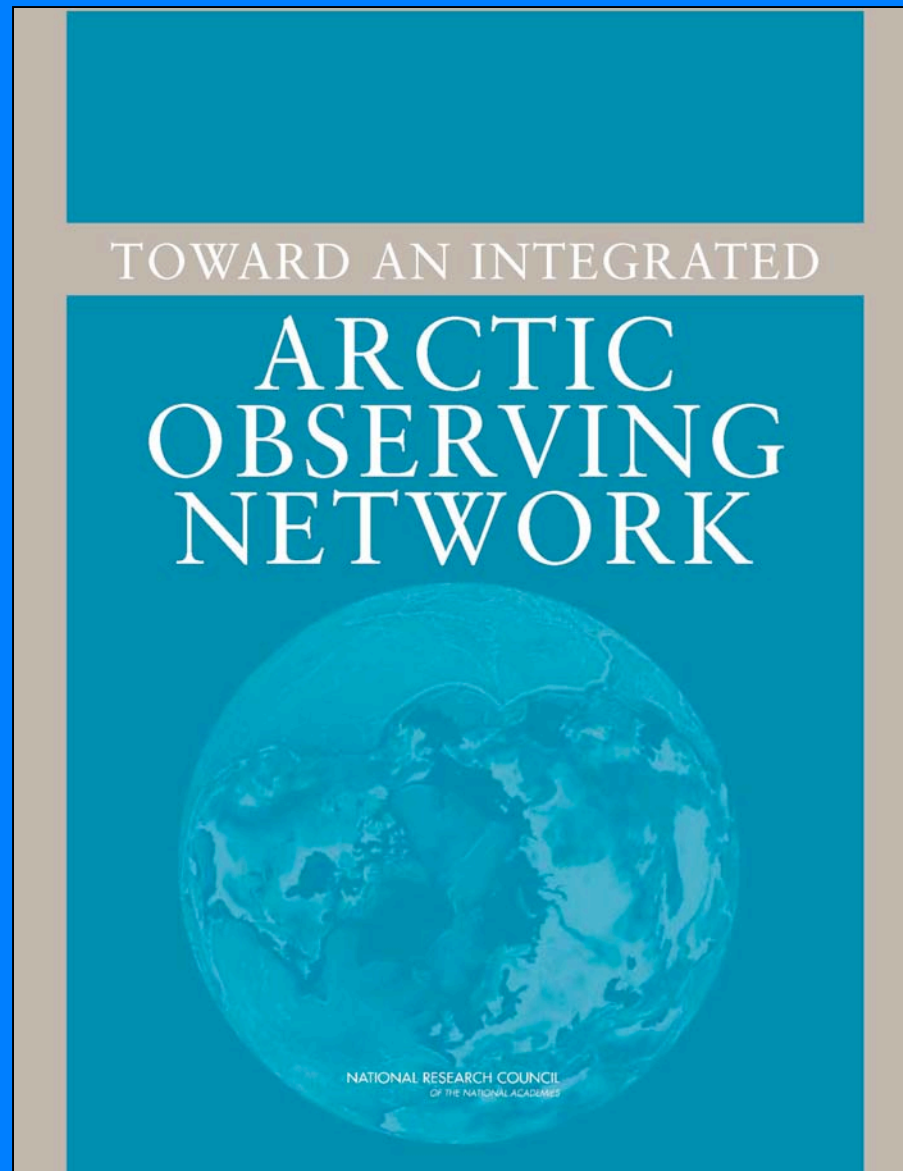
Source: Iridium, LLC

July 2006

Arctic Voice and Data



Source: Iridium, LLC



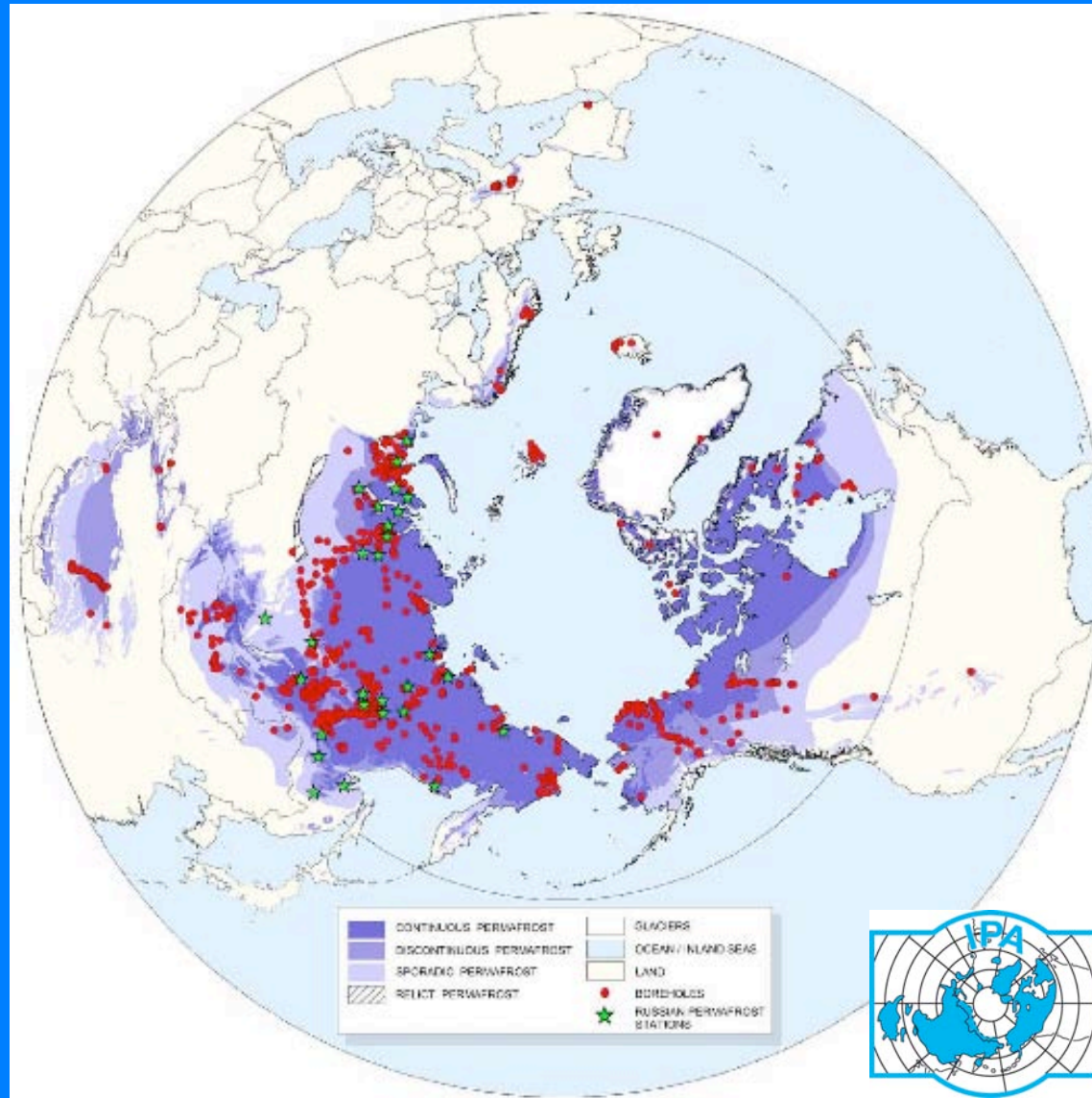
**For PDF version,
google "PRB AON"**

Polar Research Board

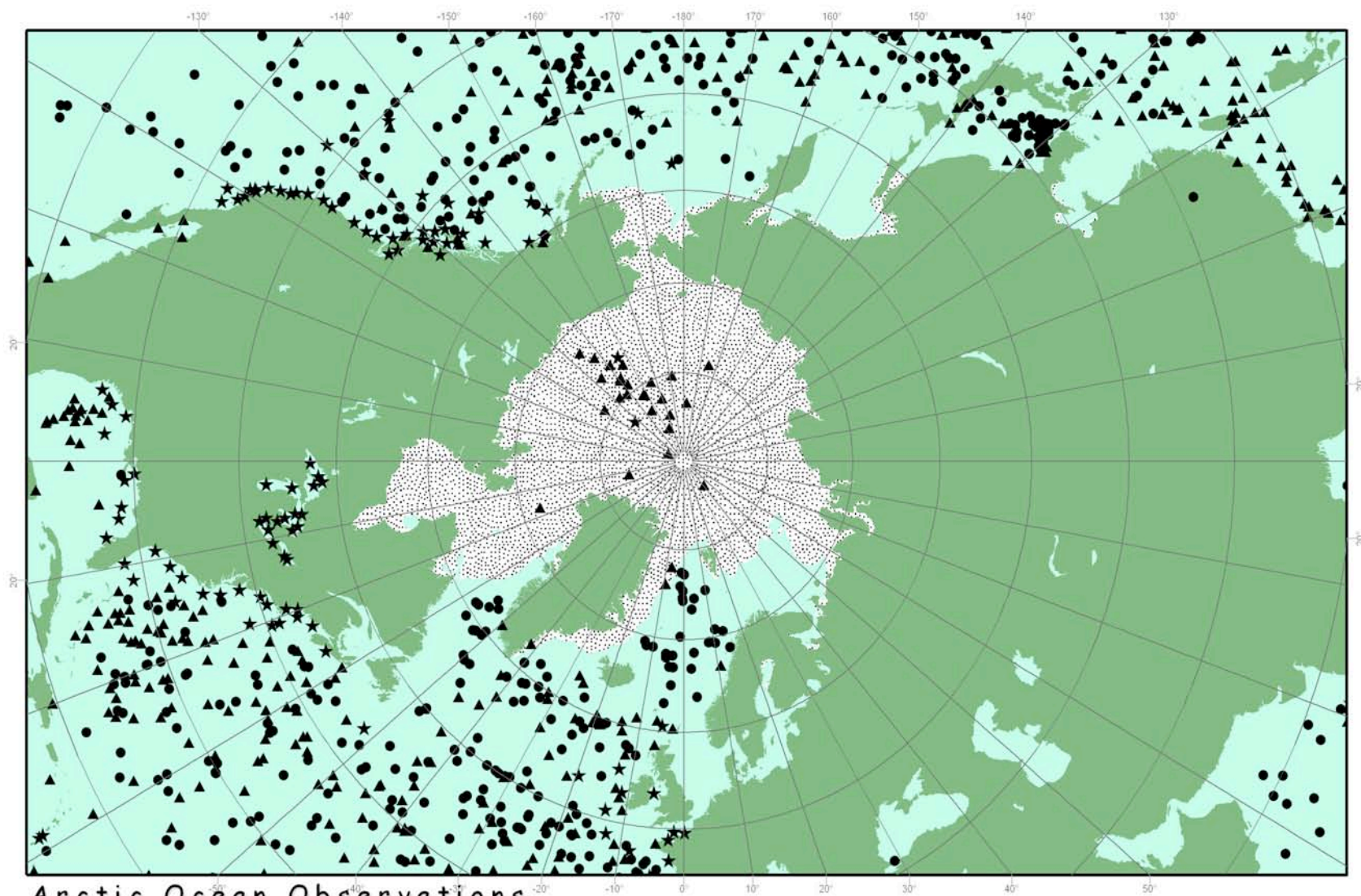
THE NATIONAL ACADEMIES

Advisers to the Nation on Science, Engineering, and Medicine

International Polar Year as a Catalyst for Action...



One example - Thermal State of Permafrost Expression of Intent



Arctic Ocean Observations,
status as of November 2005

<http://www.jcommops.org>

-  Ice Edge
-  Drifting Buoy
-  Moored Buoy
-  Argo Float

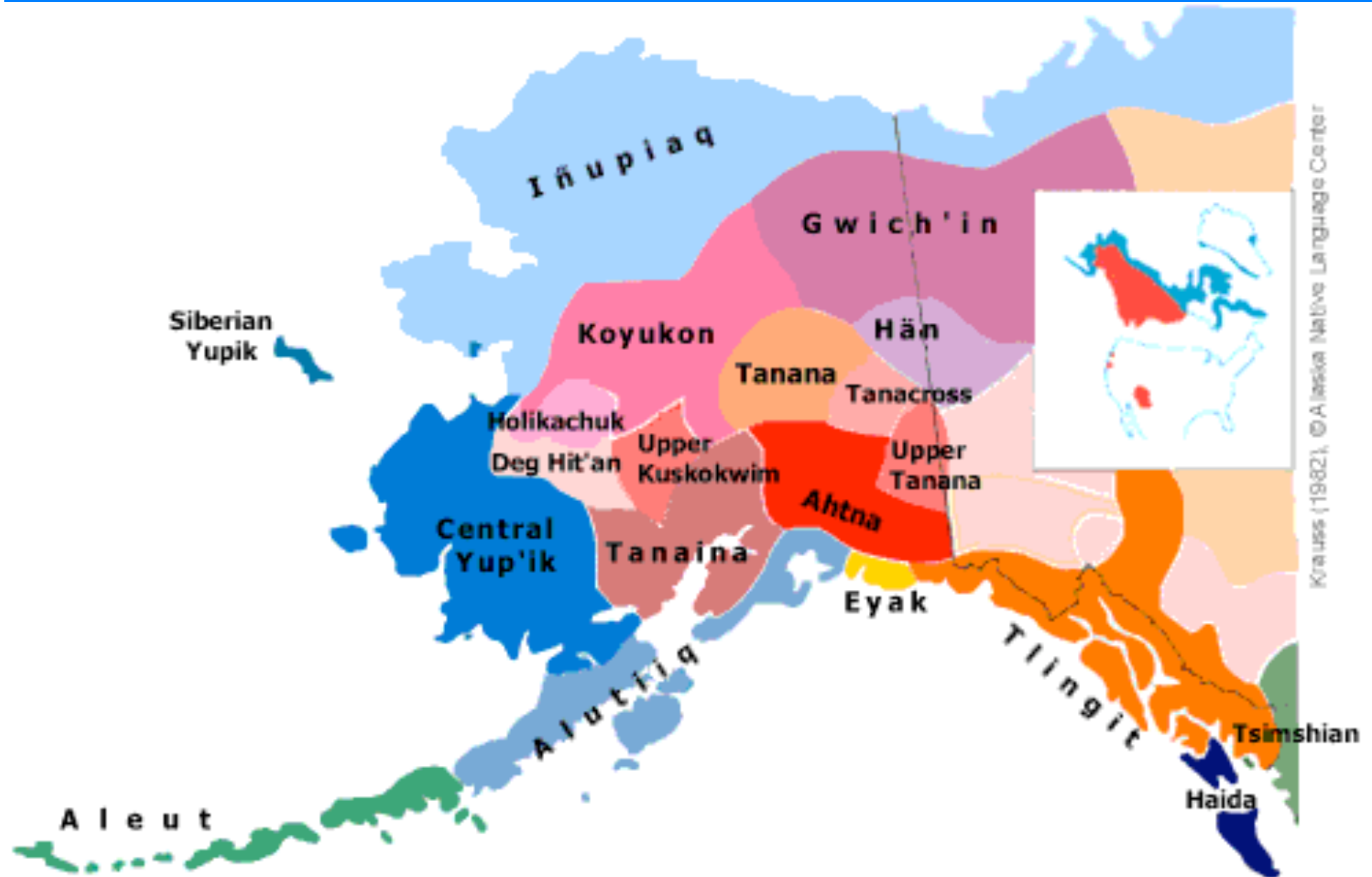


Shifting magnetic north pole

Magnetic north pole has been moving at an increasing rate across the Arctic Ocean towards Russia.



CHARLES ATKINS / Anchorage Daily News



Source: Alaska Native Language Center, UAF



Language Preservation

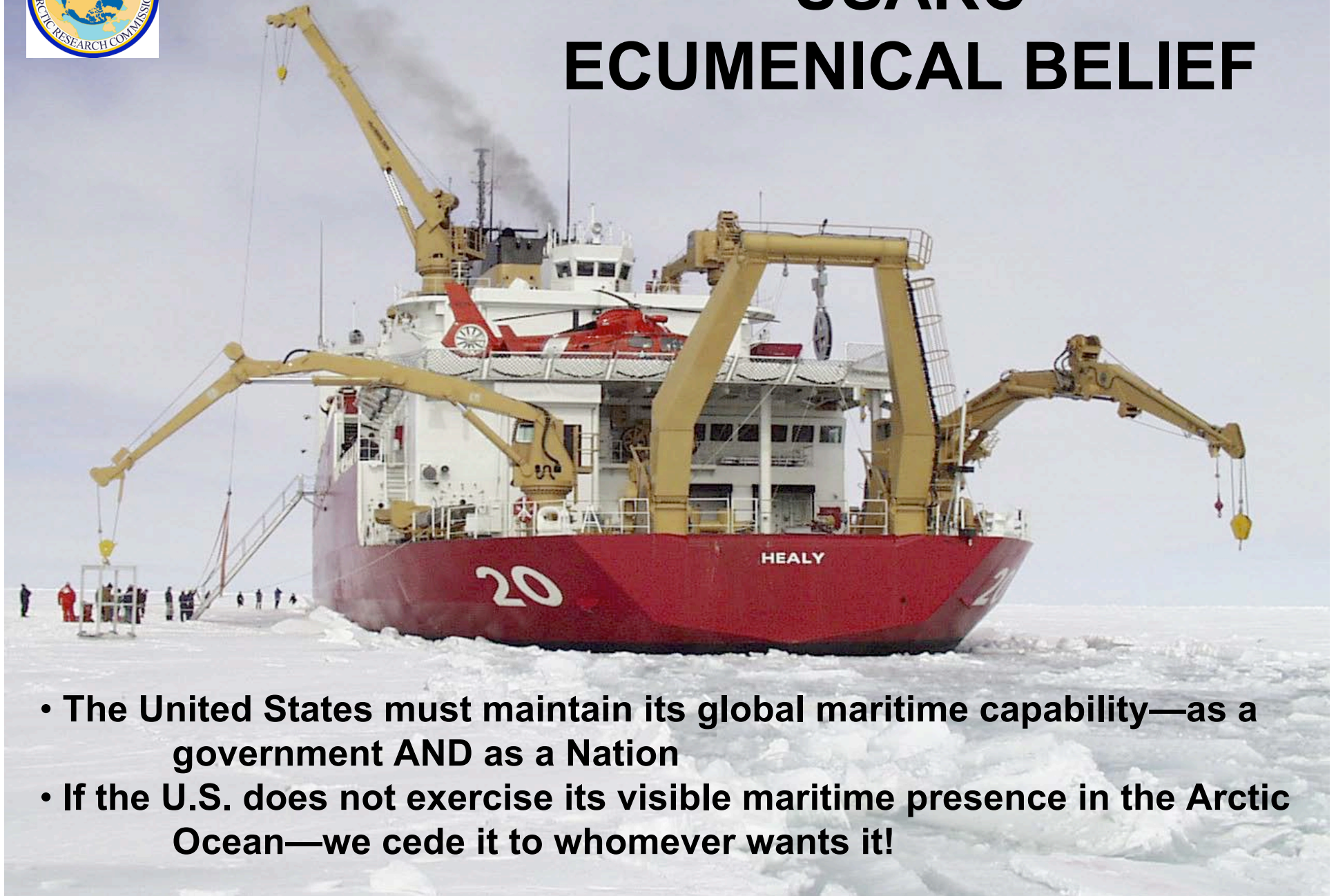


Arctic Research and Resource Development

- new territory for Alaska – extended continental shelf mapping
- new ice breakers for the top of the world
- new trade routes using our ports
- new scientific information about minerals – the AMRAP program
- Arctic Observing Network
- Oil spill prevention research



USARC ECUMENICAL BELIEF



- The United States must maintain its global maritime capability—as a government AND as a Nation
- If the U.S. does not exercise its visible maritime presence in the Arctic Ocean—we cede it to whomever wants it!

Arctic Research and Resource Development (2)

- Better topographic maps of Alaska
- Joint work with Russia in the Bering Sea
- Restore Arctic Energy Office at DOE
- Changing climate:
 - Polar bear; other potential listed species
 - Forest management practices
 - Arctic infrastructure studies
 - Carbon sequestration technologies
 - Scaling studies/tie to carbon registry
- Arctic Energy Summit



Arctic Energy



THE
ARCTIC
ENERGY
SUMMIT



AN INTERNATIONAL POLAR YEAR EVENT



ARCTIC ENERGY
Themes



RURAL



EXTRACTIVE



SUSTAINABILITY

**Thank You, and to the Explorers of the
International Polar Year, Godspeed!**



<http://www.ipy.org>



www.arctic.gov

www.us-ipy.org

www.us-ipy.gov